

GOLD FORK HOMEOWNERS ASSOCIATION (PWS# 4430035) SOURCE WATER ASSESSMENT FINAL REPORT

June 5, 2001



State of Idaho Department of Environmental Quality

Disclaimer: This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the State of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000 foot radius of your drinking water source, sensitivity factors associated with the source and characteristics associated with either your aquifer or watershed in which you live.

This report, *Source Water Assessment for Public Water System (PWS) #4430035 located in Valley County, Idaho*, describes the public drinking water system, the associated potential contaminant sources located within a 1,000' boundary around the drinking water source, and the susceptibility (risk) that may be associated with any potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. **The results should not be used as an absolute measure of risk and is not intended to undermine the confidence in your water system.**

The Gold Fork Homeowners Association drinking water system consists of two wells, which both rated a moderate susceptibility to inorganic compounds, volatile organic compounds, synthetic organic compounds, and microbial contaminants. These moderate ratings can be attribute, in large part, to the fact that DEQ was unable to obtain a well log or recent sanitary survey for the system, which could have provided information regarding well construction and specific geologic data. As a result, the susceptibility scores were increased.

The two wells are only located approximately 500 feet apart on the northeast shore of Cascade Reservoir. Regional soil information indicates the presence of poorly to moderately drained soils in the vicinity of the water system. These soil types may actually provide some additional protection by retarding the downward movement of contaminants in the unlikely event of a spill or release near either well bore.

Based on the initial computer generated contaminant source inventory conducted by the DEQ, there are no potential contaminants located within the 1,000-foot boundary. The homes along the shore of Cascade Reservoir are believed to be members of the North Lake Sewer District, so this report assumed that there were no septic systems within the delineation area. However, Cascade Reservoir is positioned approximately 150 feet from each well, but the DEQ was unable to acquire a Ground Water Under Direct Influence (GWUDI) field survey. For the purposes of the susceptibility analysis, Cascade Reservoir was considered a potential source of contamination, since it is unknown whether the reservoir is hydraulically linked to the well or not. A copy of the completed susceptibility analysis for your system along with a map showing any potential contaminant sources is included with this summary.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For the Gold Fork Homeowners Association, source water protection activities should focus on implementation of practices aimed at minimizing potential contaminant sources within the

designated source water area. Source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

For assistance in developing drinking water protection strategies please contact either the Central District Health Department or the DEQ-Boise Regional Office at 208-373-0550.

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

AST (Aboveground Storage Tanks) – Sites with aboveground storage tanks.

Business Mailing List – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

CERCLIS – This includes sites considered for listing under the **Comprehensive Environmental Response Compensation and Liability Act (CERCLA)**. CERCLA, more commonly known as **ASuperfund@** is designed to clean up hazardous waste sites that are on the national priority list (NPL).

Cyanide Site – DEQ permitted and known historical sites/facilities using cyanide.

Dairy – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

Deep Injection Well – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

Group 1 Sites – These are sites that show elevated levels of contaminants and are not within the priority one areas.

Inorganic Priority Area – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

Landfill – Areas of open and closed municipal and non-municipal landfills.

LUST (Leaking Underground Storage Tank) – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

Mines and Quarries – Mines and quarries permitted through the Idaho Department of Lands.)

Nitrate Priority Area – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

UST (Underground Storage Tank) – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

Wastewater Land Applications Sites – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

Wellheads – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

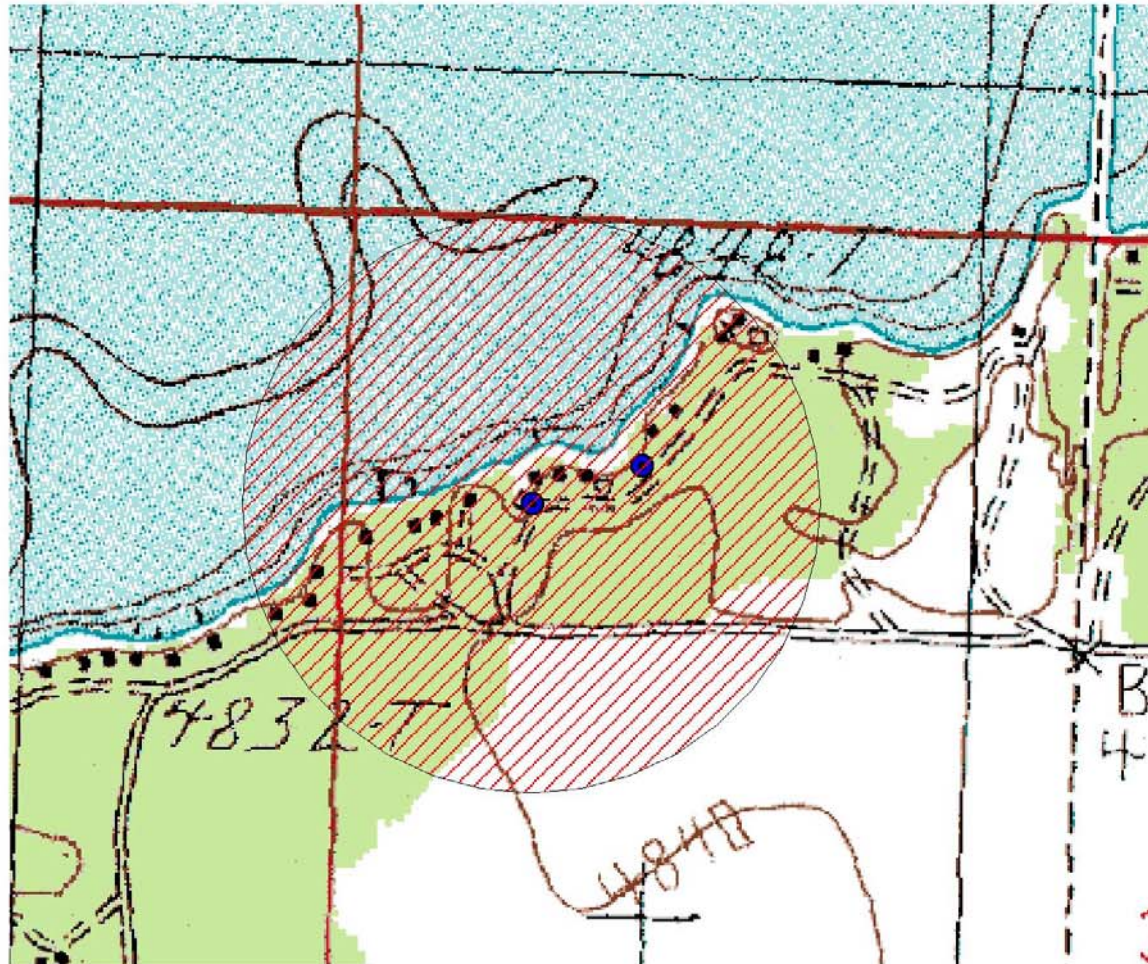
NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

Figure 1. Gold Fork Homeowners Association, Valley County Delineation WELL#1

Gold Fork Homeowners Assn.: Well #1

PWS Number: 4430035



LEGEND

- Wellhead
- + Enhanced Inventory
- AST
- ⬡ Business Mailing List
- CERCLIS Site
- ★ Dairy
- ★ Non Dairy CAFO
- Injection Well
- ⌵ Mineral Extraction Site
- NPDES Site
- RICRIS Site
- ⬢ SARA Title III Site (EPCRA)
- ⚠ Toxic Release Inventory
- ▲ Closed UST Site
- ▲ Open UST Site
- ⬢ LUST Site
- Landfill
- Wastewater Land App. Site
- ⬢ - 1000 ft. Fixed Radius

Note: Refer to Preliminary Contaminant Inventory Form for Identification of Potential Contaminant Sources

04/26/2000
Johnna Evans



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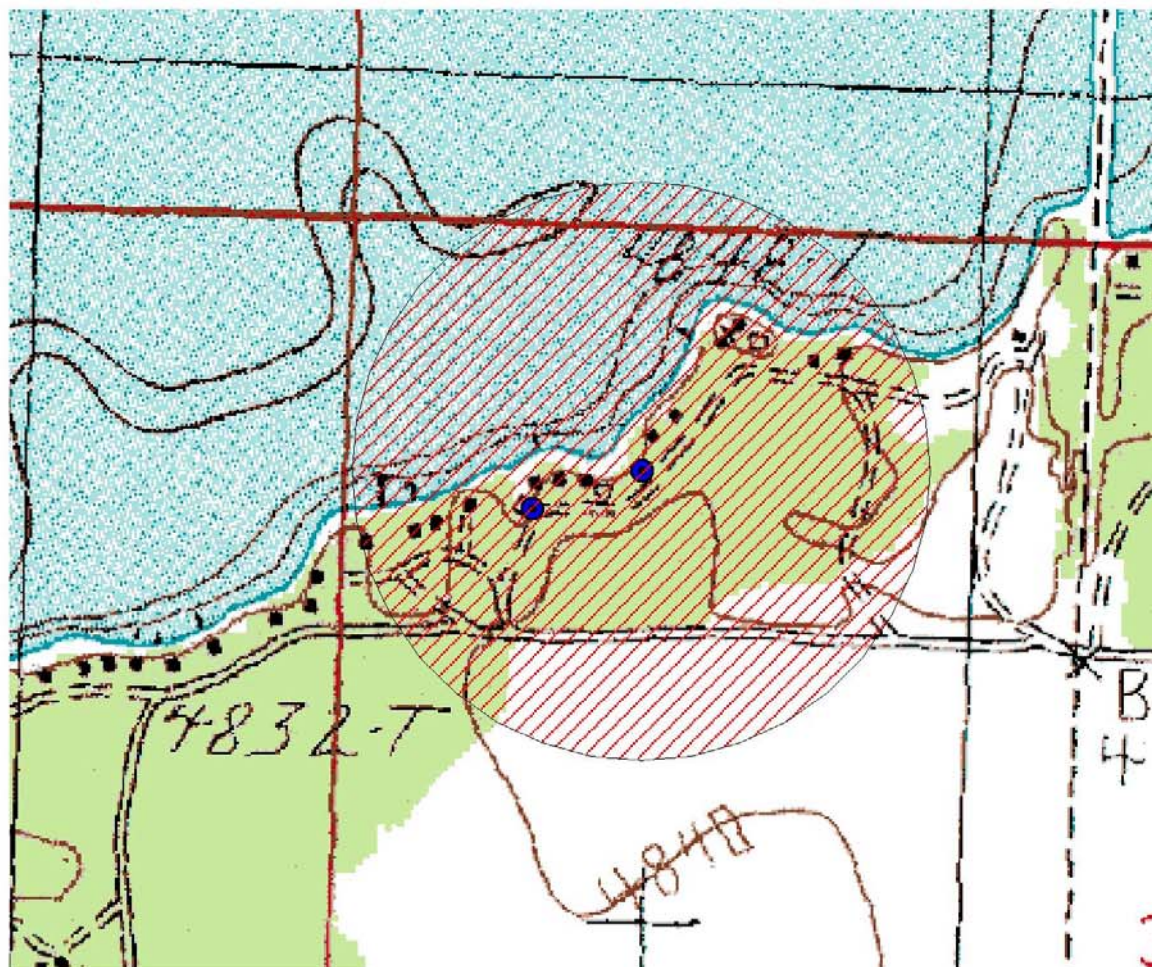


0 500 1000 1500 2000 2500 3000 Feet

Figure 1. Gold Fork Homeowners Association, Valley County Delineation WELL#2

Gold Fork Homeowners Assn.: Well #2

PWS Number: 4430035



LEGEND

- Wellhead
- ✚ Enhanced Inventory
- AST
- ⬡ Business Mailing List
- CERCLIS Site
- ★ Dairy
- ★ Non Dairy CAFO
- ⊕ Injection Well
- ⌵ Mineral Extraction Site
- NPDES Site
- ⊙ RICRIS Site
- ⊠ SARA Title III Site (EPCRA)
- ☢ Toxic Release Inventory
- ▲ Closed UST Site
- ▲ Open UST Site
- ⬠ LUST Site
- Landfill
- Wastewater Land App. Site
- ▨ - 1000 ft. Fixed Radius

Note: Refer to Preliminary Contaminant Inventory Form for Identification of Potential Contaminant Sources

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0 500 1000 1500 2000 2500 3000 Feet

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.27)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

- 0 - 5 Low Susceptibility
- 6 - 12 Moderate Susceptibility
- ≥ 13 High Susceptibility

Ground Water Susceptibility Report

Public Water System Name :

GOLD FORK HOMEOWNERS ASSN

Well# : WELL #1

Public Water System Number 4430035

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1. System Construction		SCORE			
Drill Date	Unknown				
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	NO	0			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	NO	1			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		5			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	YES	0			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	RANGELAND, WOODLAND, BASALT	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		0	0	0	0
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	0	0	0	1
(Score = # Sources X 2) 8 Points Maximum		0	0	0	2
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	2
Cumulative Potential Contaminant / Land Use Score		0	0	0	2
4. Final Susceptibility Source Score		9	9	9	10
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

Ground Water Susceptibility Report

Public Water System Name :

GOLD FORK HOMEOWNERS ASSN

Well# : WELL #2

Public Water System Number 4430035

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1. System Construction		SCORE			
Drill Date	Unknown				
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	NO	0			
Well meets IDWR construction standards	NO	1			
Wellhead and surface seal maintained	NO	1			
Casing and annular seal extend to low permeability unit	NO	2			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		5			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	YES	0			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		4			
3. Potential Contaminant / Land Use - ZONE 1A		IOC Score	VOC Score	SOC Score	Microbial Score
Land Use Zone 1A	RANGELAND, WOODLAND, BASALT	0	0	0	0
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		0	0	0	0
Potential Contaminant / Land Use - ZONE 1B					
Contaminant sources present (Number of Sources)	YES	0	0	0	1
(Score = # Sources X 2) 8 Points Maximum		0	0	0	2
Sources of Class II or III leacheable contaminants or	NO	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	2
Cumulative Potential Contaminant / Land Use Score		0	0	0	2
4. Final Susceptibility Source Score		9	9	9	10
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate